

Amendments to the Claims

1 1. (currently amended) A method for encoding a video, comprising:
2 applying a three dimensional dual-tree discrete wavelet transform to
3 the video to generate a plurality of three dimensional sequences of wavelet
4 coefficients having spatial and temporal correlation; and
5 compressing the plurality of three dimensional sequences to produce a
6 compressed bitstream corresponding to the video, and in which the
7 compressing further comprises:
8 selecting iteratively the wavelet coefficients in a large to small order,
9 in which the selecting is a noise shaping method; and
10 entropy encoding the selected wavelet coefficient; and in which the noise
11 shaping method further comprises:
12 quantizing the wavelet coefficients to produce quantized wavelet
13 coefficients;
14 inverse transforming the quantized wavelet coefficient to a quantized
15 video;
16 determining an error signal between the video and the quantized video;
17 applying the three dimensional dual-tree discrete wavelet transform to
18 the error signal; and
19 adding the transformed error signal, after a delay, to the quantized
20 wavelet coefficients.

2. (cancelled)

1 3. (previously presented) The method of claim 2, further comprising:

2 predicting a subset of the wavelet coefficients of the three dimensional
3 sequences.

1 4. (previously presented) The method of claim 1, in which there are four
2 sequences.

1 5. (original) The method of claim 2, in which the entropy encoding is
2 arithmetic encoding.

1 6. (original) The method of claim 2, in which the entropy encoding is
2 content-adaptive arithmetic coding.

7. (canceled)

1 8. (currently amended) The method of claim 1 [[7]], in which the noise
2 shaping method modifies large wavelet coefficients to compensate for a loss of
3 small wavelet coefficients, without substantially changing content of the video.

9. (canceled)

1 10. (currently amended) The method of claim 1 [[2]], in which the selecting
2 uses a matching pursuit method.

1 11. (original) The method of claim 10, in which the matching pursuit method
2 iteratively selects the wavelet coefficients in a large to small order.

12. (canceled)

13. (canceled)

1 14. (original) The method of claim 3, in which the predicted subset of the
2 wavelet coefficients are in low energy subbands.

1 15. (currently amended) The method of claim 1 [[2]], in which the sequences
2 are encoded bitplane by bitplane in a most significant bit to least significant
3 bit order.

1 16. (original) The method of claim 1, in which the compressed bitstream is
2 expressed as multiple descriptions.

1 17. (currently amended) The method of claim 16, in which the plurality of
2 three dimensional sequences are coded independently to produce the
3 multiple descriptions.

1 18. (original) The method of claim 16, in which subsets of the wavelet
2 coefficient are coded to produce the multiple descriptions.

1 19. (original) The method of claim 16, further comprising:
2 estimating, in a receiver, lost descriptions from a subset of the
3 multiple descriptions received.